

In the Claims:

1. A device for vibration damping and/or controlling the flexion of an object in machining, wherein the object is a tool, tool holder or workpiece,
characterised in that the device comprises at least one force exchange device external of a surface of the object, wherein said force exchange device is attached to a locator device surrounding the object, and is operative to either
exchanging a force having a force component directed at right angle to the surface of the object, or
exchanging directly or via a mechanical lever, a moment between the object and the device.
2. A device according to claim 1,
characterised in that the device further comprising a force transmission device surrounding the object.
3. A device according to claim 1,
characterised in that the force exchange device is disposed between a clamp for the object and the force transmission device, and is fixed to or recessed in the clamp.
4. A device according to claim 1,
characterised in that the force exchange device is disposed between the force transmission device and the locator device.
5. A device according to claim 1,
characterised in that an elastic material is disposed between the force transmission device and the locator device.

6. A device according to claim 5,
characterised in that the elastic material is disposed between said at least one force transmission device and the object or between said at least one force exchange device and locator device .
7. A device according to claim 5,
characterised in that the elastic material is made from rubber.
8. A device according to claim 2,
characterised in that the force exchange device is configured to provide a force having a force component at right angles to the force transmission device while also parallel to the surface of the object.
9. A device according to claim 2,
characterised in that the force transmission device is positioned between said force exchange device and the object.
10. A device according to claim 9,
characterised in that the force transmission device and said force exchange device are positioned in the locator device.
11. A device according to claim 1,
characterised in that the at least one force exchange device exchanges a moment provided by a connector part for the object for fixing the object to a clamp for the object.
12. A device according to claim 11,
characterised in that said force exchange device is positioned in the clamp for the object.

13. A device according to claim 1,
characterised in that the device is movably disposed with respect to the object.
14. A device according to claim 1,
characterised in that said at least one force exchange device is at least one actuator.
15. A device according to claim 14,
characterised in that it comprises a control unit for regulating input to the at least one actuator.
16. A device according to claim 15,
characterised by a sensor to be disposed on or in the object for detecting vibrations in and/or the flexion of the object, said control unit receiving signals from the sensor for regulating the input based on said signals.
18. A device according to claim 16,
characterised in that the sensor is an accelerometer.
19. A device according to claim 14,
characterised in that the actuator is a shaker, a pneumatic and hydraulic actuator, a piezoelectric force actuator or any other force, pressure or torsion actuator.
20. A device according to claim 14,
characterised in that the actuators are adapted to be passively controlled, said actuators being pneumatic dampers or shunted actuators, for example, and/or actively using a damping algorithm, for example.
21. A device according to claim 1,
characterised in that the device is modular and permits use of different dimensions and geometrical configurations of the object.

22. A device according to claim 1,
characterised in that said at least one force exchange device is at least one force
applying device for applying said force and/or for applying said moment to the object .
23. A device according to claim 1,
characterised in that said at least one force exchange device is at least one
damping device for absorbing vibrations from the object, said damping device being
adapted to absorb said force component and/or absorb said moment from the object.